

1 **WHAT IS CLAIMED IS:**

2 1. A light emitting diode (LED) having a good heat-dissipating
3 capability, comprising

4 a leadframe having

5 a first pin with an upper sealed portion and a bottom exposed
6 portion composed of a neck and a conductor extending from the neck for
7 connecting to a printed circuit board; and

8 a second pin having an upper sealed portion and a bottom
9 exposed portion composed of a neck and a conductor extending from the neck
10 for connecting to the printed circuit board;

11 an LED chip mounted on the upper sealed portion of the first pin and
12 wire bonded to the upper portion of the second pin; and

13 an encapsulant covering and sealing the upper sealed portion of the first
14 and second pin and the LED chip.

15 2. The LED as claimed in claim 1, further comprising a transverse fin
16 expending from the neck of the first fin.

17 3. The LED as claimed in claim 1, further comprising a transverse fin
18 expending from the neck of the second fin.

19 4. The LED as claimed in claim 2, further comprising a transverse fin
20 expending from the neck of the second fin.

21 5. The LED as claimed in claim 2, wherein each conductor extends
22 longitudinally from the neck to form a longitudinal conductor and each neck is
23 larger than the conductor in a surface area.

24 6. The LED as claimed in claim 3, wherein each conductor extends

1 longitudinally from the neck to form a longitudinal conductor and each neck is
2 larger than the conductor in a surface area.

3 7. The LED as claimed in claim 4, wherein each conductor extends
4 longitudinally from the neck to form a longitudinal conductor and each neck is
5 larger than the conductor in a surface area.

6 8. The LED as claimed in claim 2, wherein
7 each conductor extends laterally from the neck to form a lateral
8 conductor and has a surface area; and
9 each neck has a surface area equal to the surface area of the conductor.

10 9. The LED as claimed in claim 3, wherein
11 each conductor extends laterally from the neck to form a lateral
12 conductor and has a surface area; and

13 each neck has a surface area equal to the surface area of the conductor.

14 10. The LED as claimed in claim 4, wherein
15 each conductor extends laterally from the neck to form a lateral
16 conductor and has a surface area; and

17 each neck has a surface area equal to the surface area of the conductor.

18 11. The LED as claimed in claim 1, further comprising at least one slot
19 in the neck of the first pin.

20 12. The LED as claimed in claim 2, further comprising at least one slot
21 in the neck of the first pin.

22 13. The LED as claimed in claim 3, further comprising at least one slot
23 in the neck of the first pin.